



Home Upgrade Program Accelerator

Informational Webinar
June 18, 2015

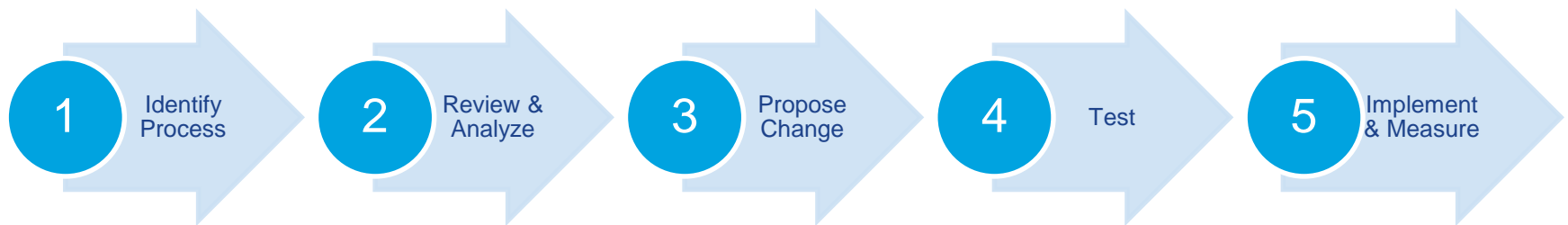
What is a Better Buildings Accelerator?

Called for in the President's Climate Action Plan

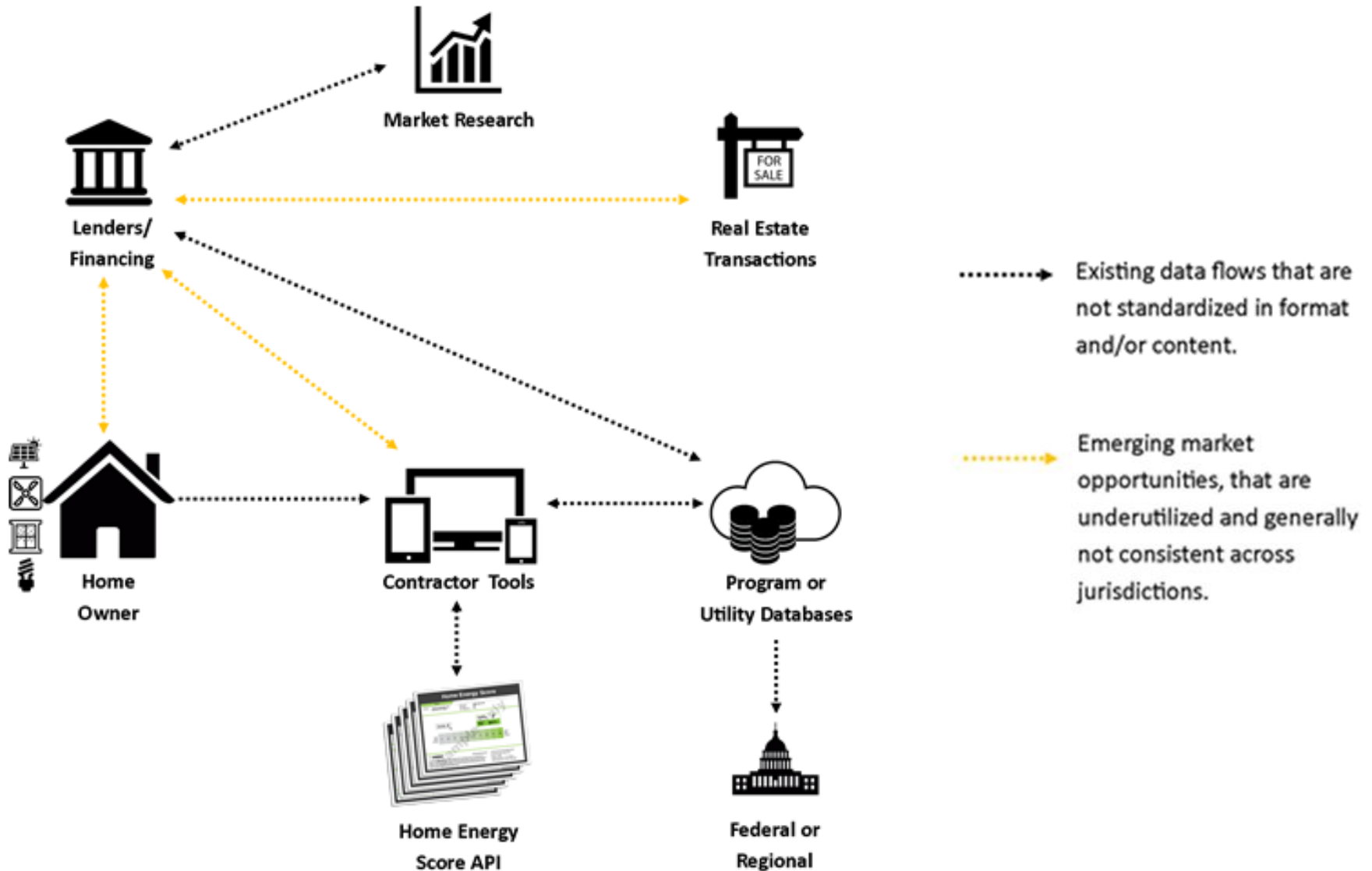
- Better Buildings Accelerators are designed to demonstrate specific innovative approaches in energy data, performance contracting, and utility strategic energy management, which upon successful demonstration will accelerate investment in energy efficiency.
- The Home Upgrade Program Accelerator is designed to help home energy upgrade programs bring services to more homes across the country by leveraging data management strategies that minimize costs while improving overall program effectiveness.

Accelerate Process Improvements

By improving the processes used to manage and track home upgrades, review the quality of work, and evaluate savings and other impacts, programs can scale up to reach goals of completing millions of home energy upgrades annually.

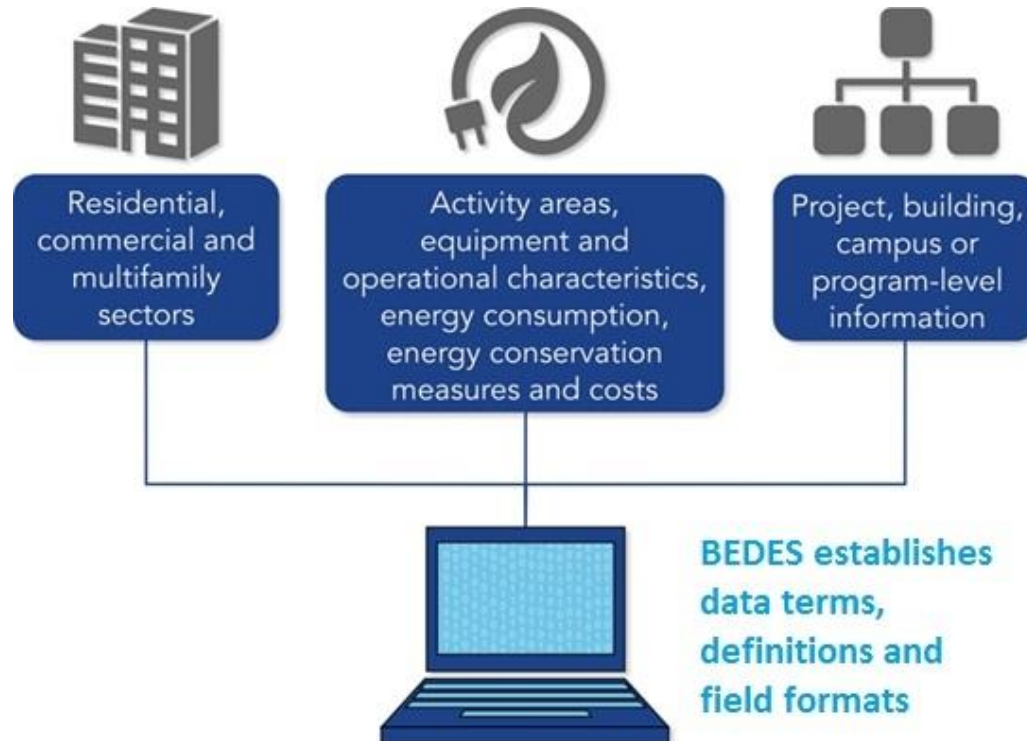


The Existing Data Infrastructure



The Building Energy Data Exchange Specification (BEDES)

BEDES provides a common set of data terms, definitions and field formats that can be used by public and private software tools, data schemas and databases working within the building energy performance sector.



What is HPXML?

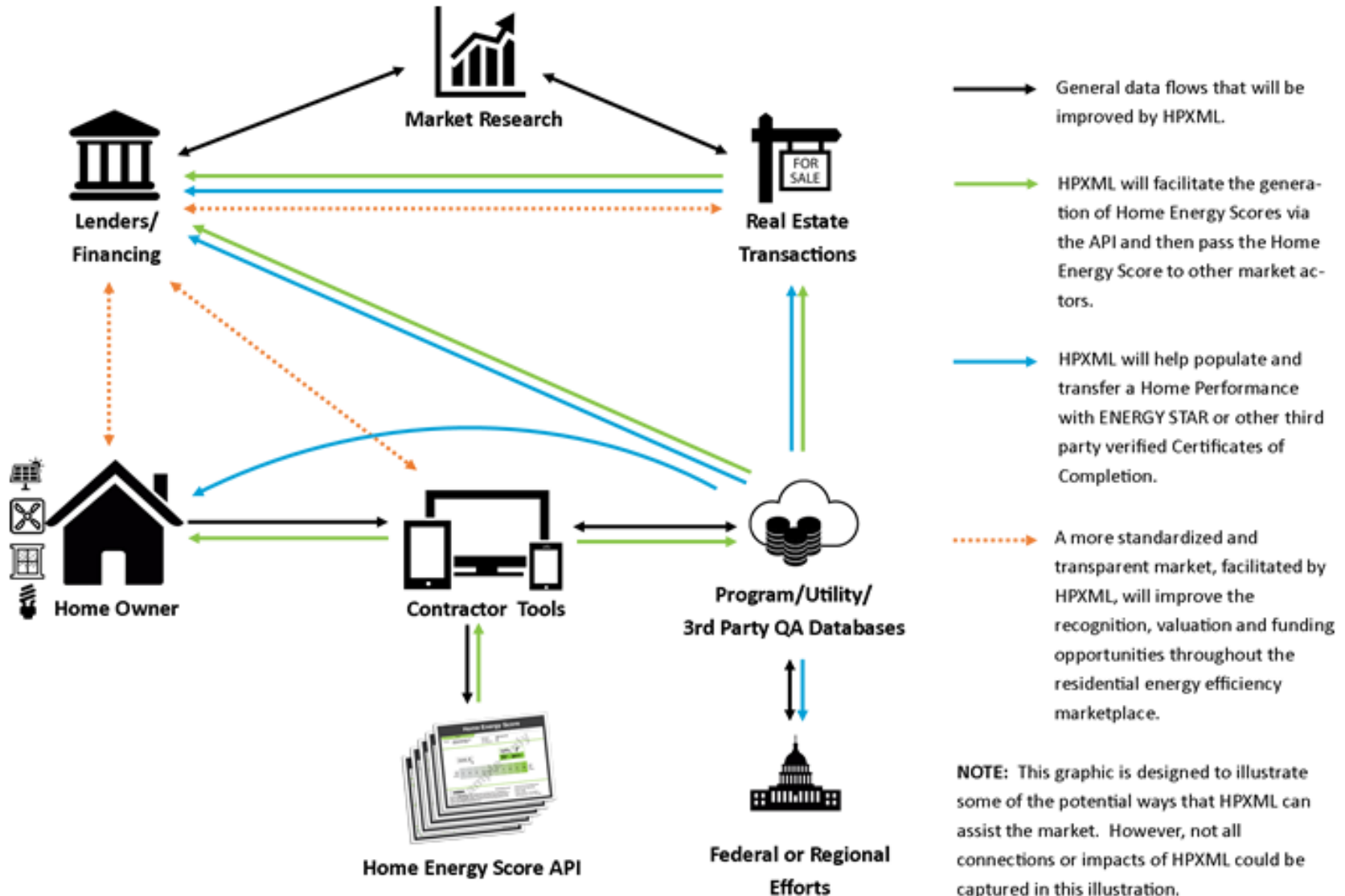
Two primary data standards published by the Building Performance Institute (BPI) for collecting and transferring home energy upgrade information.

- Dictionary of terms for home upgrades aligned with BEDES
 - Home Performance-Related Data Collection (BPI-2200)
- Schema for data transfer using extensible mark-up language (XML)
 - Home Performance-Related Data Transfer (BPI-2100)

EXAMPLE HPXML

```
<WaterHeatingSystem>
  <SystemIdentifier id="dhw1"/>
  <FuelType>natural gas</FuelType>
  <WaterHeaterType>storage water heater</WaterHeaterType>
  <Location>conditioned space</Location>
  <CombustionVentingSystem idref="combvent1"/>
</WaterHeatingSystem>
```


HPXML Enabled Infrastructure



HPXML: An Important Tool

- Standardize the collection of residential building data.
- Increase data interoperability between industry software system.
- Facilitate implementation consistency across jurisdictions to drive economies of scale.
- Create consistent, high quality, and large scale data sets to inform market research and valuation of EE resources.

Program Operational Efficiency

- Improve contractor reporting by enabling contractor choice of audit software:
 - Example: APS Home Performance Program **doubled contractor satisfaction** with new software environment.
- Streamline data collections and auto validation:
 - Example: APS Home Performance Program **decreased admin cost per project by 50%**
- Streamline reporting and data transfer.

Benefits to Trade Ally

- Choice in tools for data collection and modelling
 - Aligns better with contractor business systems
 - Take advantage of innovation
 - Integration with internal quality management
- Streamline user experience for lower participation costs
 - Example: APS program, contractors reporting **31% reduction in admin time per project**
- Potential integration with other services
 - Marketing
 - Financing
- Potential for seamless experience across markets and programs

Other Process Improvements

- Make customer program application process easier and reduce financing approval times
 - EXAMPLE: 95% of NYSERDA customers move from decision to use program to **approved contract offer within 1 week.**
- Streamline and simplify work scope reviews
 - EXMAPLE: NYSERDA approve time **reduced from 8 to 1 day and FTE's reduced from 3 to 1**

Process Improvement Opportunities

Programs can reduce administrative time and cost

- Simplify and streamline customer application process.
- Streamline data collection and improve data consistency.
- Enable faster quality assurance review.
- Facilitate faster project approvals for contractors.
- Enable contractor selection of modeling software (reduces training costs and technical support needs).
- Shorter cycle evaluation of impacts.



We're looking to
partner with a few
good program
champions.

Home Upgrade Program Accelerator

Vision

Lower cost administration for home energy upgrade programs to enable growth to millions of homes per year

1

Complete Software Updates

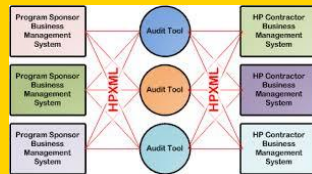
- Implement Home Performance XML data standard in software programs that represent >25% of home upgrades nationally



2

Document Process Changes

- Demonstrate approaches for reducing program administrative costs enabled by HPXML and other strategies



3

Determine Cost Savings

- Analyze and document cost and time savings of streamlined approaches



4

Disseminate Best Practices

- Highlight partner successes, develop implementation models, and encourage adoption of best practices.



5

Success Metric

Deploy HPXML in programs representing at least 25% of home upgrades nationally and document time and cost reductions from this and other approaches to streamline program administration.

Benefits to Accelerator Partners

- Help implementing HPXML and other process improvements
- Reduce program cost and enhance effectiveness
- Improve participating contractor satisfaction
- Receive public recognition from DOE as a leader

Accelerator Partners

- **Administrators of home energy upgrade programs**
- **Committed to the Accelerator goals**
- **Pledge** to set specific commitments to improve a programs effectiveness.
 - Implement HPXML and other practices to reduce the administrative burden of collecting home energy upgrade data.
- **Identify** one or more barriers to implementing HPXML, or other opportunities for process improvements.
- **Participate** in technical assistance and/or peer sharing forums.
- **Share** materials, results, and lessons learned from their innovative approaches.
- **Report** on progress towards the goal annually including providing information on program administration costs and progress in reducing those costs.

Initial Partners

- APS
- NYSERDA
- Build It Green
- Clean Energy Works
- Pearl Home Certification
- Building Performance Institute

How will Success be Achieved?

Commitments	Timeframe
Identify Barriers and Implement Strategies	
Identify one or more barriers to implementing HPXML, or other opportunities for process improvements to reduce partner administrative costs and improve program's effectiveness.	June – July 2015
Partners participate in one-on-one call with DOE to discuss strategies and a work plan to achieve partner organization's commitments and identify metrics that will show progress (e.g. reduced cost or time, increased satisfaction or program output).	June – Sept. 2015
Partners implement strategies outlined in work plan to reduce administrative costs and improve program effectiveness.	Sept 2015 – May 2018; Quarterly Check-in
Share Progress and Successes	
Participate in quarterly peer exchange calls with other Accelerator partners and collaborators to discuss common challenges and successful strategies (e.g., HPXML use case needs, tracking metrics, valuable resources).	Quarterly
Partners report progress on annual work plan including information on metrics of success (e.g. reduced cost, time or improve satisfaction or program output).	Annually; Jan-Feb
Partners provide DOE with information on achievements for Better Buildings Annual Report, media announcements, or case studies.	Annually; March-May
Meet at the ACI Home Performance Conference for partner working meeting.	Annually; April or May

**Accelerator
Information
Webinar**

June 18, 2015

**New Partner
Commitment Media
Announcement**

October 2015

Partners Share Solutions
Better Buildings Summit, Washington, DC
May 2016

**Partner Kick-
off Call**
Mid-July 2015

Partner Working Session Home
Performance Conference, Austin, TX
April 2016



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